



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,601	01/09/2002	Minoru Usui	448563/0203 LR:DLS	7457

7590 07/14/2003

Lawrence Rosenthal
Stroock & Stroock & Lavan LLP
180 Maiden Lane
New York, NY 10038

EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/043,601

Applicant(s)
SHINADA ET AL.

Examiner
Anh T. N. Vo

Art Unit
2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

Art Unit: 2861

DETAILED ACTION

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

Claim 1 objected to because of the following informalities: the recitation "said lid" on line 4 lacks antecedent basis. Appropriate correction is required.

Claim Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published

Art Unit: 2861

under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-4 and 6-12 are rejected under 35 USC 102 (e) as being anticipated by Shimada et al. (US Pat. 6,302,530).

Shimada et al. disclose in Figures 1-5b, 7a-8b and 10a-12b an ink cartridge (41) comprising:

- a housing (46) having a bottom wall (48) and an opening (Figure 10a);
- an ink supply port (50a-50d) formed on the bottom wall (48) (Figure 10b);
- a through hole (64a-64d) formed in a lid (60) and connecting the inside and outside of the ink cartridge (1) (Figures 11b and 12b);
- an air vent section formed on said lid (60) which communicates with atmospheric air when the ink cartridge (1) is in use;
- a circuitous channel (65a-65d) formed in an outer surface of said lid (60) and connecting said through hole (64a-64d) to said air vent section, said circuitous channel (65a-65d) comprising a tunnel part which is a hole (66a-66d) formed in said lid (60) (Figure 12b);
- a first seal member (a seal is counted from an element 60 to the right side of the element 67) affixed to said lid (31) over said through hole (64a-64d) and one part of said circuitous channel (65a-65d); and

Art Unit: 2861

- a second, removable seal member (a seal is counted from an element 60 to the left side of the element 67) affixed to said lid over said air vent section, said second seal member being removed when the ink cartridge (1) is in use (Figures 12b);
- wherein said second seal member is spaced apart from said first seal member for defining a non-sealed portion, and said non-sealed portion of said lid is disposed over said tunnel part of said circuitous channel (Figures 12b);
- a groove (35d-35f) formed in an inner surface of said lid (30) and connecting to said tunnel part of said circuitous channel (Figures 8b);
- a plurality of ink chambers (2a-2f) for containing different inks therein, said ink chambers being formed within said housing, and a plurality of said circuitous channels and said through holes a respective circuitous route and through hole corresponding to a respective one of said ink chambers (Figures 1 and 10a-12b);
- wherein the ink cartridge (1) comprises three ink chambers, three circuitous channels and one air vent section connecting to all the three circuitous channels (Figures 1 and 10a-12b);
- wherein the ink cartridge (1) comprises five ink chamber (2a-2f), five circuitous channels and two air vent sections connecting to at least two of said five circuitous channels (Figures 1 and 10a-12b);
- a porous member (59) fitted within an ink chamber defined by said housing(46) and said lid (60), said porous member being impregnated with ink (Figure 10a);
- a recess formed in the outer surface of said lid (60), and said air vent section being formed within said recess (Figures 10a-10b and 1b); and
- wherein an opening (66a-66d) of said air vent section is formed in a side wall of said recess (Figures 12b).

Allowable Subject Matter


Art Unit: 2861

Claim 5 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses an ink cartridge comprising the tunnel part of the circuitous channel that is inclined to connect directly to the air vent section, and the depth of said tunnel part is shorter than the thickest part of the lid in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo. whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M. The fax number of this Group 2861 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956


ANH T.N. VO
PRIMARY EXAMINER

July 5, 2003